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LL          II             SSSSSS
LL          II             SS
LL          II             SS
LL          II             SS
LL          II             SS
LLLLLLLLLLLL IIIIII          SSSSSSSS
LLLLLLLLLLLL IIIIII          SSSSSSSS

```

```
0000 55 :  
0000 56 : ASSORTED MACROS USED IN FCP CODE  
0000 57 :  
0000 58 :  
0000 59 : .MACRO SET_IPL LEVEL ; SET PROCESSOR IPL (DUMMY NOW)  
0000 60 : .ENDM SET_IPL  
0000 61 :  
0000 62 : MACRO USED TO SIGNAL FATAL ERRORS (INTERNAL CONSISTENCY CHECKS).  
0000 63 :  
0000 64 : .MACRO BUG_CHECK CODE, TYPE, MESSAGE  
0000 65 : HALT ; SIMPLY CALL A HALT FOR NOW  
0000 66 : .ENDM BUG_CHECK  
0000 67 :  
0000 68 : MACRO TO SIGNAL AN ERROR STATUS AND CONTINUE.  
0000 69 :  
0000 70 : .MACRO ERROR_CODE  
0000 71 : MOVL #CODE, USER_STATUS  
0000 72 : .ENDM ERROR_CODE  
0000 73 :  
0000 74 : MACRO TO SIGNAL AN ERROR STATUS AND EXIT.  
0000 75 :  
0000 76 : .MACRO ERR_EXIT CODE  
0000 77 : MOVZWL CODE, -(SP)  
0000 78 : HALT ; UNTIL WE FIGURE THIS OUT  
0000 79 : .ENDM ERR_EXIT  
0000 80 :  
0000 81 : TYPE CODES USED TO IDENTIFY BLOCKS BEING READ BY READ_BLOCK.  
0000 82 : NOTE THAT READ_BLOCK CONTAINS A TABLE INDEXED BY THESE CODES.  
0000 83 :  
00000000 0000 84 : HEADER_TYPE = 0 ; FILE HEADER  
00000001 0000 85 : BITMAP_TYPE = 1 ; STORAGE BITMAP  
00000002 0000 86 : DIRECTORY_TYPE = 2 ; DIRECTORY BLOCK  
00000003 0000 87 : INDEX_TYPE = 3 ; OTHER INDEX FILE BLOCKS  
0000 88 :  
0000 89 : TYPE CODES USED TO IDENTIFY BLOCKS OF MEMORY REQUESTED FROM THE  
0000 90 : ALLOCATOR. NOTE THAT THESE CODES INDEX INTO A TABLE IN ALLOCATE.  
0000 91 :  
00000000 0000 92 : FCB_TYPE = 0 ; FILE CONTROL BLOCK  
00000001 0000 93 : WCB_TYPE = 1 ; WINDOW BLOCK
```



```
0000 1      .TITLE CHNUCB - GET ASSUGNED UCB ADDRESS OF CHANNEL
0000 2      .IDENT 'V04-000'
0000 3
0000 4
0000 5 *****
0000 6 *
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0000 24
0000 25 *
0000 26 *****
0000 27
0000 28 ++
0000 29
0000 30 FACILITY: F11ACP STRUCTURE LEVEL 1
0000 31
0000 32 ABSTRACT:
0000 33
0000 34 THIS ROUTINE RETURNS THE ADDRESS OF THE UCB ASSIGNED TO THE GIVEN
0000 35 CHANNEL.
0000 36
0000 37 ENVIRONMENT:
0000 38
0000 39 STARLET OPERATING SYSTEM, INCLUDING PRIVILEGED SYSTEM SERVICES
0000 40 AND INTERNAL EXEC ROUTINES. THIS ROUTINE MUST BE CALLED IN
0000 41 KERNEL MODE.
0000 42
0000 43 --
0000 44
0000 45 AUTHOR: ANDREW C. GOLDSTEIN, CREATION DATE: 28-APR-1977 16:26
0000 46
0000 47 MODIFIED BY:
0000 48
0000 49 V02-000 ACG0167 Andrew C. Goldstein, 18-Apr-1980 13:40
0000 50 Previous revision history moved to MOUNT.REV
0000 51 **
0000 52
0000 53
0000 54 EQUATED SYMBOLS:
0000 55
00000004 0000 56 CHANNEL = 4 ; ADDRESS OF CHANNEL NUMBER ARG
0000 57
```

CHNUCB
V04-000

- GET ASSUGNED UCB ADDRESS OF CHANNEL^{F 4}

16-SEP-1984 00:59:24 VAX/VMS Macro V04-00
5-SEP-1984 02:03:26 [MOUNT.SRC]CHNUCB.MAR;1

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0000 58 \$CCBDEF

; DEFINE CHANNEL CONTROL BLOCK

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VC

```
0000 60 :++
0000 61 :
0000 62 : FUNCTIONAL DESCRIPTION:
0000 63 :
0000 64 :     THIS ROUTINE RETURNS THE ADDRESS OF THE UCB ASSIGNED TO THE GIVEN
0000 65 :     CHANNEL.
0000 66 :
0000 67 : CALLING SEQUENCE:
0000 68 :     CALL     GET_CHANNELUCB (ARG1)
0000 69 :
0000 70 : INPUT PARAMETERS:
0000 71 :     ARG1: CHANNEL NUMBER
0000 72 :
0000 73 : IMPLICIT INPUTS:
0000 74 :     NONE
0000 75 :
0000 76 : OUTPUT PARAMETERS:
0000 77 :     NONE
0000 78 :
0000 79 : IMPLICIT OUTPUTS:
0000 80 :     NONE
0000 81 :
0000 82 : ROUTINE VALUE:
0000 83 :     NONE
0000 84 :
0000 85 : SIDE EFFECTS:
0000 86 :     NONE
0000 87 :
0000 88 :--
0000 89 :
00000000 90 : .PSECT $CODE$,NOWRT, LONG
0000 91 :
0000 92 GET_CHANNELUCB::
0000 93 : .WORD ^M<R2,R3,R4,R5> : SAVE REGISTERS
50 04 AC D0 0002 94 : MOVL CHANNEL(AP),R0 : GET CHANNEL NUMBER
00000000'9F 16 0006 95 : JSB @#IOCSVERIFYCHAN : GET UCB WITH EXEC SUBROUTINE
04 50 E8 000C 96 : BLBS R0,10$ : BRANCH IF GOOD
000F 97 : ERR_EXIT R0
50 61 D0 0013 98 10$: MOVL CCB$$_UCB(R1),R0 : RETURN UCB ADDRESS AS VALUE
04 0016 99 : RET
0017 100 :
0017 101 :
0017 102 :
0017 103 : .END
```


CHNUCB
Symbol table

- GET ASSIGNED UCB ADDRESS OF CHANNEL ^{M 4}

16-SEP-1984 00:59:24 VAX/VMS Macro V04-00
5-SEP-1984 02:03:26 [MOUNT.SRC]CHNUCB.MAR;1

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BITMAP_TYPE = 00000001
CCBSL_UCB = 00000000
CHANNEL = 00000004
DIRECTORY_TYPE = 00000002
FCB_TYPE = 00000000
GET_CHANNELUCB 00000000 RG 02
HEADER_TYPE = 00000000
INDEX_TYPE = 00000003
IOCSVERIFYCHAN ***** X 02
WCB_TYPE = 00000001

+-----+
! Psect synopsis !
+-----+

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 (0.)	00 (0.)	NOPIC USR
\$ABS\$	00000000 (0.)	01 (1.)	NOPIC USR
\$CODE\$	00000017 (23.)	02 (2.)	NOPIC USR

CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE
CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE
CON	REL	LCL	NOSHR	EXE	RD	NOWRT	NOVEC	LONG

+-----+
! Performance indicators !
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	39	00:00:00.08	00:00:00.80
Command processing	128	00:00:00.70	00:00:03.66
Pass 1	131	00:00:01.18	00:00:05.01
Symbol table sort	0	00:00:00.01	00:00:00.04
Pass 2	42	00:00:00.52	00:00:02.39
Symbol table output	2	00:00:00.02	00:00:00.16
Psect synopsis output	2	00:00:00.02	00:00:00.07
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	347	00:00:02.53	00:00:12.13

The working set limit was 900 pages.
3241 bytes (7 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 30 non-local and 1 local symbols.
197 source lines were read in Pass 1, producing 13 object records in Pass 2.
12 pages of virtual memory were used to define 11 macros.

+-----+
! Macro library statistics !
+-----+

Macro library name	Macros defined
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	1
-\$255\$DUA28:[SYS.LIB]STARLET.MLB;2	3
TOTALS (all libraries)	4

80 GETS were required to define 4 macros.

There were no errors, warnings or information messages.

CHNUCB
VAX-11 Macro Run Statistics

- GET ASSUGNED UCB ADDRESS OF CHANNEL^{I 4}

16-SEP-1984 00:59:24 VAX/VMS Macro V04-00
5-SEP-1984 02:03:26 [MOUNT.SRC]CHNUCB.MAR;1

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(2)

MACRO/LIS=LISS:CHNUCB/OBJ=OBJ\$:CHNUCB MSRC\$:FCPDEF/UPDATE=(ENHS:FCPDEF)+MSRC\$:CHNUCB/UPDATE=(ENHS:CHNUCB)+EXECMLS/LIB

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